

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) In a router, a method of routing a message from a sending computer system to a receiving computer system such that a routing path for the message can be changed before the message reaches the receiving computer system, comprising the following:

an act of the router receiving a message that originated at the sending computer system and that is to be delivered to the receiving computer system, the message having being comprised of at least three discrete portions comprising—including a router list portion that identifies one or more preferred routers one or more routers and which is modified during the routing of the message, an ultimate destination identifier portion comprising an identifier that identifies the ultimate destination of the message and which remains unchanged during the routing of the message, and a message content portion comprised of a message being sent from the sending computer system to the receiving computer system and which remains unaltered during the routing of the message, where each portion~~which~~ is distinguished from and independent from the router each remaining portion~~list portion~~;

an act of the router accessing routing rules that specify how the message should be routed to the receiving computer system;

an act of the router comparing at least a portion of one or more of the three discrete portions of the message to the routing rules to determine whether the router list portion should be reconfigured, wherein the router adds or deletes one or more routers in the router list portion as appropriate;

an act of the router removing the router itself from the router list portion prior to sending the message so that a subsequent router becomes a top most router in the router list portion; and

an act of the router sending the message to the top most router a next router identified in the router list portion, wherein the next top most router identified in the router list portion identifies that it is an appropriate recipient for the message.

2. (Currently Amended) The method as recited in claim 1, wherein the act of the router receiving a message that originated at the sending computer system and that is to be delivered to the receiving computer system comprises an act of the router receiving a Simple Object Access Protocol (SOAP) message.
3. (Original) The method as recited in claim 1, wherein the routing rules are present in one or more of the router, the next router, the sending computer system, and the message.
4. (Previously Presented) The method as recited in claim 1, further comprising identifying from a local file at the next router whether the router list portion should be reconfigured, wherein the next router adds or deletes one or more other routers in the router list portion as appropriate.
5. (Previously Presented) The method as recited in claim 2, wherein the next router identifies that it is an appropriate target of the sent message based on one or more of the next router's position in the router list portion, and a router designation contained in the message.
6. (Currently Amended) The method as recited in claim 2, further comprising, an act of the router detecting that the ultimate destination is an appropriate recipient of the message upon receiving the message at the ultimate destination.
7. (Currently Amended) The method as recited in claim 6, wherein the act of the router detecting that the ultimate destination is the correct recipient comprises:
 - an act of the router identifying the one or more routers in the router list portion sequentially beginning with a top most router;
 - an act of the router identifying that the router is the top most router in the router list portion; and
 - an act of the router confirming at the ultimate destination that the ultimate destination is the top most router in the router list portion.
8. (Previously Presented) The method as recited in claim 1, further comprising an act of providing a router preference in the router list portion prior to relaying the message to the router.

9. (Previously Presented) The method as recited in claim 1, wherein the router is a user-created router, the routing rules comprising rules based on the content portion of the message, the user-created router determining whether to add or a delete a next router from the router list based on a comparison of the message content portion of the message and the routing rules.
10. (Previously Presented) The method as recited in claim 1, further comprising reconfiguring the router list portion contained within the message prior to the message reaching the ultimate destination, whether the router list portion is reconfigured based at least in part on a comparison of the routing rules and one or more of the three discrete portions of the message including a router identified in the routing list portion, the geographic origin of the message, and the message content portion.
11. (Previously Presented) The method as recited in claim 1, wherein the act of comparing at least a portion of one or more of the three discrete portions of the message to the routing rules to determine whether the router list should be reconfigured comprises an act of comparing the message content portion to the routing rules, wherein the routing rules comprise rules based on the content portion of the message.

12. (Currently Amended) In a router, a method of routing a message from a sending computer system to a receiving computer system such that a routing path for the message can be changed before the message reaches the receiving computer system, comprising the following:

an act of the router receiving a message that originated at the sending computer system and that is to be delivered to the receiving computer system, the message having at least three discrete portions comprising a router list portion that identifies one or more routers, an ultimate destination identifier portion, and a message content portion which is distinguished from and independent from the router list portion;

a step for the router adjusting a routing path for the message based in part on the ultimate destination portion of the message, the routing list portion of the message, and a referral cache;

an act of the router removing the router from the router list portion prior to sending the message so that a subsequent router becomes a top most router in the router list portion; and an act of sending the message to a next router in the router list portion, wherein the next router identifies that it is an appropriate recipient for the message.

13. (Currently Amended) The method as recited in claim 12, wherein the step for adjusting a routing path for the message comprises:

a corresponding act of the router accessing routing rules that specify how the message should be routed to the receiving computer system; and

a corresponding act of the router comparing at least a portion of one or more of the three discrete portions of the message to the routing rules to determine whether the router list portion should be reconfigured, wherein the router adds or deletes one or more routers in the router list portion as appropriate.

14. (Previously Presented) In a sending computer system, a method of routing a message to a receiving computer system such that a routing path for the message can be changed before the message reaches the receiving computer system, comprising the following:

an act of identifying the receiving computer system, and one or more preferred routers by which the message is intended to be relayed to the receiving computer system;

an act of creating the message, the message comprising including at least three discrete portions comprising including an ultimate destination identifier portion comprising an identifier that identifies the ultimate destination of the message and which remains unchanged during the routing of the message representing the receiving computer system, a message content portion comprised of a message being sent from the sending computer system to the receiving computer system and which remains unaltered during the routing of the message, and a message router list portion that identifies one or more preferred routers and which is modified during the routing of the message, the message router list portion including the one or more preferred routers;

an act of referencing a cached router list stored at the sending computer system;

an act of referencing content logic stored at the sending computer system, wherein the content logic describes routing rules based on the discrete message content portion of the message;

an act of modifying the message router list portion, the modification being based on router data contained within the cached router list and the content logic, wherein a router from the cached router list is added to the message router list portion or a router is deleted from the message router list portion; and

an act of sending the message to a first router included in the modified router list portion.

15. (Previously Presented) The method as recited in claim 14, wherein the act of modifying the message router list portion based on router data contained within the cached router list comprises an act of modifying the message router list portion based on routing rules that indicate one or more preferred routers through which the message should be relayed before reaching the receiving computer.

16. (Previously Presented) A computer program product for use in a router, the computer program product for implementing a method for routing a message from a sending computer system to a receiving computer system such that a routing path for the message can be changed before the message reaches the receiving computer system, the computer program product comprising one or more computer-readable media having stored thereon computer executable instructions that, when executed by a processor, cause the router to perform the following:

receive a message that originated at the sending computer system and that is to be delivered to the receiving computer system, the message having three discrete portions consisting of a router list portion that identifies one or more routers, an ultimate destination identifier portion that identifies the ultimate destination of the message, and a message content portion that consists of the information being sent from the sending computer system to the receiving computer system, said message content portion being unmodified by the routers and which is distinguished from and independent from the router list portion;

access routing rules that specify how the message should be routed to the receiving computer system;

compare the message content portion of the message_to the routing rules to determine whether the router list portion should be reconfigured, wherein the router adds or deletes one or more routers in the router list portion as appropriate;

remove the router from the router list portion prior to sending the message so that a subsequent router becomes a top most router in the router list portion; and

send the message to a next router in the router list portion, wherein the next router identifies that it is an appropriate recipient for the message.

17. (Previously Presented) The computer program product as recited in claim 16, wherein the an act of receiving a message that originated at the sending computer system and that is to be delivered to the receiving computer system comprises an act of receiving a Simple Object Access Protocol (SOAP) message.

18. (Original) The computer program product as recited in claim 16, wherein the routing rules are present in one or more of the router, the next router, the sending computer system, and the message.

19. (Previously Presented) The computer program product as recited in claim 16, further comprising identifying from a local file at the next router whether the router list portion should be reconfigured, wherein the next router adds or deletes one or more routers in the router list portion as appropriate.

20. (Previously Presented) The computer program product as recited in claim 17, wherein the next router identifies that it is an appropriate target of the sent message based on one or more of the next router's position in the router list portion, and a router designation contained in the message.

21. (Original) The computer program product as recited in claim 17, further comprising, an act of detecting that the ultimate destination is an appropriate recipient of the message upon receiving the message at the ultimate destination.

22. (Previously Presented) The computer program product as recited in claim 21, wherein the act of detecting that the ultimate destination is the correct recipient comprises:

an act of identifying the one or more routers in the router list portion sequentially beginning with a top most router;

an act of identifying at the router that the router is the top most router in the router list portion;

an act of confirming at the ultimate destination that the ultimate destination is the top most router in the router list portion.

23. (Previously Presented) The computer program product as recited in claim 16, further comprising an act of providing a router preference in the router list portion prior to relaying the message to the router.

24. (Previously Presented) The computer program product as recited in claim 16, wherein the router is a user-created router, the routing rules comprising rules based on the content portion of the message, the user-created router determining whether to add or a delete a next router from the router list portion based a comparison of on the message content portion of the message and the routing rules.

25. (Previously Presented) The computer program product as recited in claim 16, further comprising reconfiguring the router list contained within the message prior to the message reaching the ultimate destination, whether the router list is reconfigured based at least in part on a comparison of the routing rules and one or more of the three discrete portions of the message including a router identified in the routing list portion, the geographic origin of the message, and the message content portion.

26. (Canceled)

27. (Previously Presented) A computer program product for use in a sending computer system, the computer program product for a method for routing a message from a sending computer system to a receiving computer system such that a routing path for the message can be changed before the message reaches the receiving computer system, the computer program product comprising one or more computer-readable media having stored thereon computer executable instructions that, when executed by a processor, cause the sending computer system to perform the following:

identify the receiving computer system, and one or more preferred routers by which the message is intended to be relayed to the receiving computer system;

create the message, the message including at least three discrete portions comprising an identifier portion representing the receiving computer system, a message content portion, and a message router list portion, the message router list portion including the one or more preferred routers;

reference a cached router list stored at the sending computer system;

reference content logic stored at the sending computer system, wherein the content logic describes routing rules based on the discrete content portion of the message;

modify the message router list portion based on router data contained within the cached router list and the content logic, wherein a router from the cached router list is added to the message router list portion or a router is deleted from the message router list portion; and

send the message to a first router included in the modified router list portion.

28-29. (Cancelled)

30. (Previously Presented) The method of claim 14 wherein the message is created in a markup language and wherein the receiving computer system identifier portion is contained within metadata of the message.

31. (Previously Presented) The computer program product of claim 27 wherein the message is created in a markup language and wherein the receiving computer system identifier portion is contained within metadata of the message.